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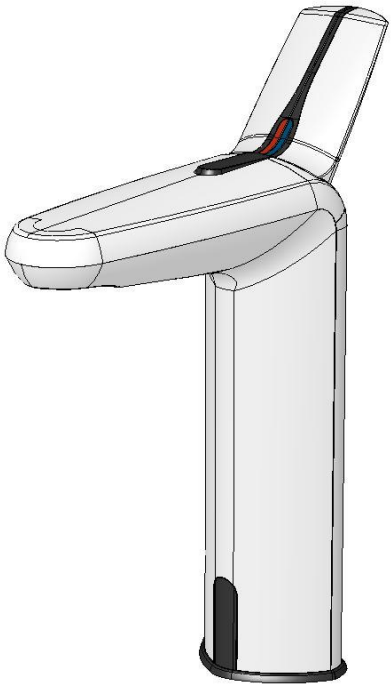
AQUA COOLER

MANUFACTURERS OF
WATER COOLERS AND
INDUSTRIAL CHILLERS.

UH1 UNDERBENCH BOILER

Product Manual
001-D066



FORWARD

This manual is designed to explain the installation, operation and the basic maintenance of the product. It is recommended that for service issues Aqua Cooler Pty Ltd be contacted before and work commences.

CONTACT DETAILS

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SAFETY

THE BOILER IS NOT DESIGNED FOR OUTDOOR USE.

- **This boiler and tap is designed to be safe in the use for which it was planned provided that it is installed, started up and maintained in accordance with the instructions contained in this manual.**
- **The boiler contains electrical components that operate at line voltage. It therefore must be isolated from the electrical supply before being worked on. All maintenance operations that require access to the boiler must be carried out by suitably qualified technicians who have a thorough understanding of all necessary precautions associated with servicing the boiler.**
- **The liquids to be used in the appliance must be compatible the materials used in the construction of the appliance. The appliance is designed to dispense potable drinking water.**
- **All panels must be re-installed after carrying out any maintenance work.**
- **The boiler and the tap are not to be used by the infirmed or children unless they are supervised by responsible persons, qualified to carry out the supervision.**
- **The unit should be secured to prevent it from toppling over.**

- **Where the above symbol is shown there are live electrical parts and the utmost care should be taken.**
- **Work should be carried out by qualified electricians only.**
- **Electrical connection should be in accordance with all the local relevant safety standards for wiring safety.**
- **Always isolate power from the unit when working on it.**
- **Besides the power supply, all the components in the boiler are 24V except the element.**

SAFETY

Manual Handling.

The unit weights approximately 8kg dry. Always keep in mind safe manual handling procedures when moving the unit.

Disposal.

The unit must be disposed of in a proper fashion. The components used in the appliance are all RoHS compliant but the parts should be disposed of in a proper fashion.

MARKING

The boiler will have a serial number sticker on it showing relevant electrical data and most importantly an alpha numeric unique serial number

CERTIFICATION

The unit has been tested to IEC60335 for electrical safety

The water tank, the tap and all the interconnection water pipes have been tested to AS4020 for connection and the system has WaterMark certification

WARRANTY

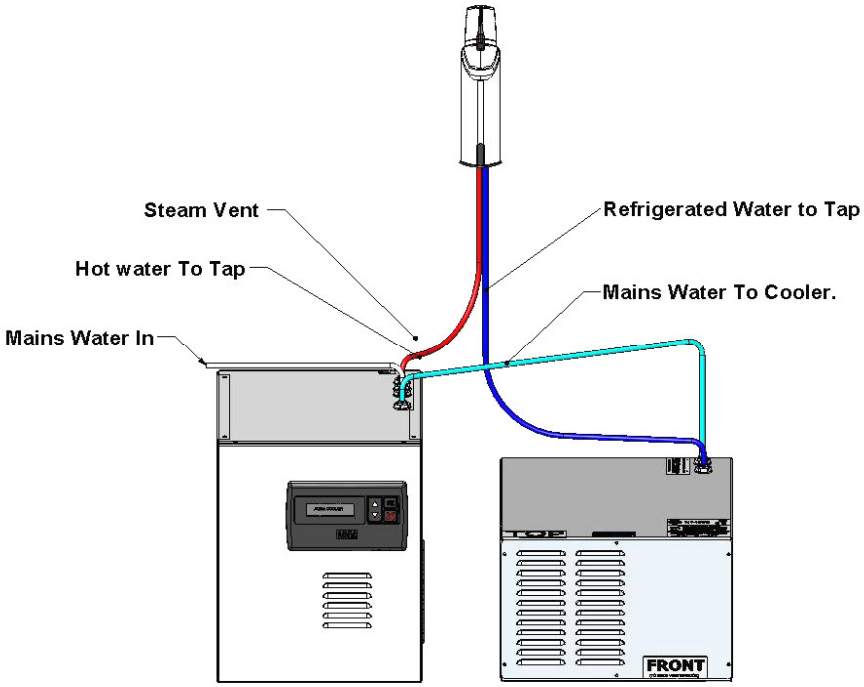
Aqua Cooler Pty Ltd warrants this product for 12 months from the date of delivery to the first purchaser. This warranty covers all defects from faulty workmanship and materials. Its does not cover defects that are occasioned from misuse, alteration or installation not in accordance with the Aqua Cooler installation instructions.

GENERAL INFORMATION

The tap and boiler are designed to be used together. The boiler as microchip based controller which controls the immersed element and operates the solenoid valves, water level control, temperature control and the pump. The unit is design to run near boiling.

The tap which is designed to be mounted on a kitchen bench has a small amount of electronics inside it which signals the controller to operate the water delivery system. The unit can be installed with an under bench water cooler.

GENERAL INFORMATION



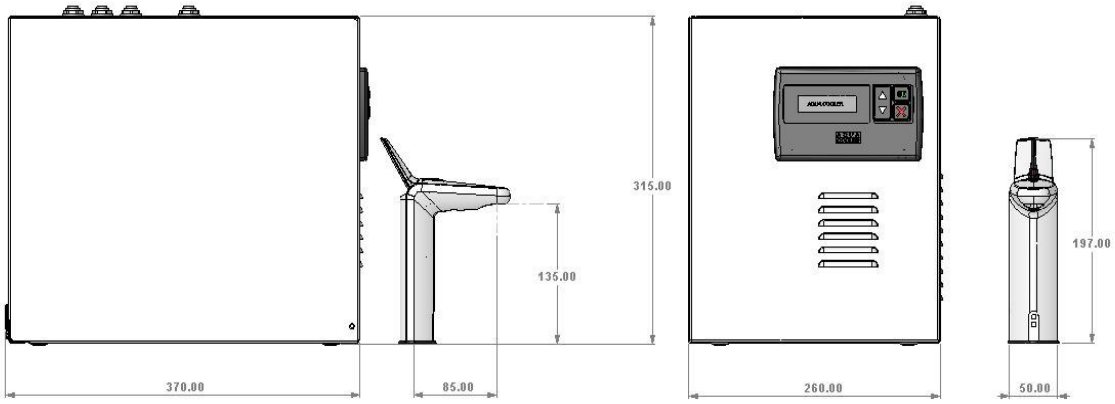
INTENDED USE.

The boiler and tap with a water cooler are to be used to provide boiling and either cold water or room temperature water for drinking. Any use beyond this is not deemed to be its use as intended.

TECHINICAL DATA

Model		UH1
Element Capacity	Watts	1000
Heating capacity at 98 DgC	L/Hr	11
Tank capacity	Litres	2
Dry weight	Kg	8
Power requirements	Volts AC	230-240
Maximum current draw	A	4.2-4.4
Power cable (Supplied)	2.0m 2 core plus earth IEC cable	
Maximum water pressure	KPa	700

DIMENSIONS



TRANSPORT AND STORAGE

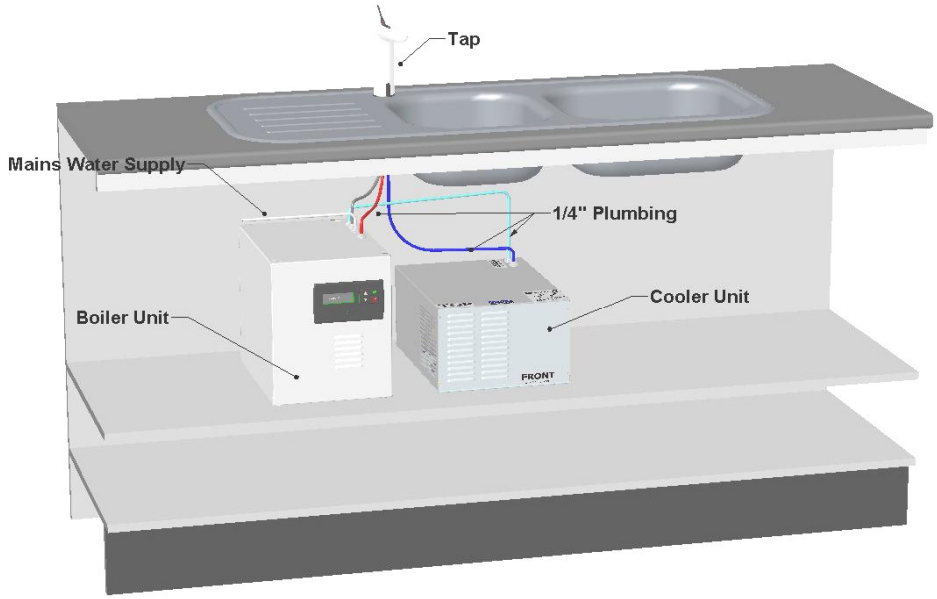
Immediately upon receipt of the unit, carefully inspect the boiler, tap and cooler for any damage that may have occurred in transit. Any such damage must be noted on the carrier's delivery documents. It is the consignee's responsibility to make any subsequent claims upon the carrier or respective insurance company.

Any hidden damage should be reported to Aqua Cooler as soon as possible. The boiler and the cooler should be delivered upright and with the plastic packaging intact.

If the unit is to be stored before installation then care must be taken to ensure no foreign matter can get into the water pipes. If the storage is for a prolonged period it is recommended that the water circuit be changed with nitrogen and sealed.

INSTALLATION

First check that the installation under the sink is large enough for both the boiler and the cooler. Other considerations might be room for the filter or room to safely install the tap. The boiler is designed top be fitted on a flat even surface. The tap is designed to be fitted to the kitchen sink or on the kitchen bench. If you are installing the boiler without the cooler then it is not necessary to install ventilation on the cupboard door.

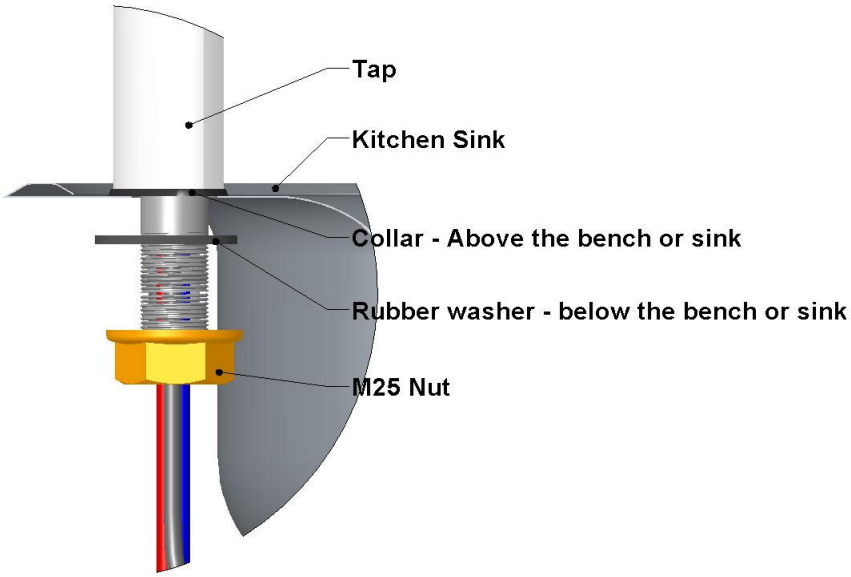


The diagram shows a typical installation under a kitchen sink. It is advisable that the units under the sink are installed as close to the tap as possible and also making sure that they are as near to the mains water supply as possible.

<u>Installing the Tap</u>

To install the tap, it is important that the water nozzles are hanging over the sink or some other method drainage for over flows or dripping. See the dimension drawing above for the overhang of the tap.

Using a 25mm (1") hole saw drill a hole in the kitchen bench or the sink. Carefully feed the hoses and the telephone cable through the hole. Make sure that the black collar is above the sink or bench and that the tap is nestled into the recess. Under the sink put the hoses and communication cable through the rubber washer and the nut (in that order) and start the thread on the nut – do not tighten. Align the tap again to ensure that water will flow into the sink and tighten the nut up under the tap. Check that the tap is secure.



Connection of the Water Piping

The water pipes are connected via ¼" pneumatic hoses. The boiler water unit has four bulkhead connectors mounted into the lid of the unit. Each is clearly marked by the sticker on the side of the unit as to which hose goes where. The unit will be supplied with hoses to be connected between the boiler, cooler and the tap.

The hoses that lead to the tap are clearly marked with where they are to be installed.

Mains pressure water in – this is to be connected to the "WATER IN" connector on the top of the unit. It is recommended that if the pressure is above 700 kPa then a pressure limiting valve should be fitted.

If a water cooler is not going to be installed with the boiler then plug the hose with "COLD" on the sticker into the "WATER TO COLD SIDE"

If a cooler is going to be installed with then a hose will need to be run from the "WATER TO COLD SIDE" to the water inlet on the cooler. A hose will then need to be run from the water outlet on the cooler to the fitting on the hose with "COLD WATER" on the sticker.

The vent hose from the tap will have a sticker on it indicating that it is for the vent. It should be pushed into the "VENT" connection on the top of the boiler.

"HOT WATER" – this is the boiling water from the unit. It needs to be connected to the hose from the tap with "HOT WATER" on the sticker wrapped around hose.

Hanging from the tap will be a phone line with a RJ11 jack on the end of it. It needs to be clicked into the phone plug at the rear of the unit. There will be some tape over the communication port to keep moisture out of the unit – remove this and click the phone jack into the port. Do not trim this cord.

Turn the water supply on to the unit and plug the power on to the unit. The hot water reservoir will automatically start filling and once it has reached full the element will come on.

If there is a cooler installed with the boiler then open the cold lever on the tap and run until the cold tank is bed of air and a steady stream of cold water starts coming from the tap.

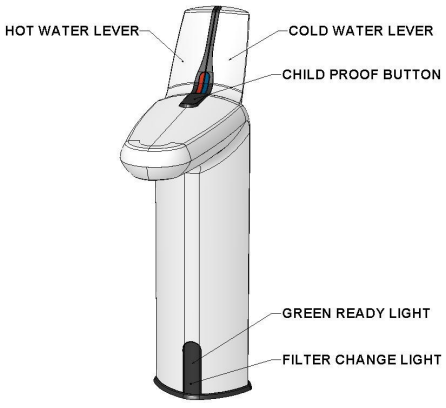
Programming the Boiler

Setting the Timer	• **Using the keypad on the controller, scroll through the menu until "SET TIME" shows** • **Press the "OK" button and the hour numeral will flash** • **Using the scroll buttons change this to the right hour of the day. Press "OK" again and the minute numeral will start to flash. Again use the scroll buttons to change this to the right time** • **The screen will confirm your choice** • **Once the time is right press the "X" twice and the controller will revert to the home screen.**
Time of day ON/OFF setting – this allows the operator to have the boiler come on say an hour before staff arrives in the	• **Using the keypad scroll through to "SET ON TIME" and press "OK"** • **Following the procedures outlined above set the time of day that you want the unit to turn on** • **Press "OK" – the screen will confirm your choice** • **Again repeat the procedure to "SET OFF TIME" If the unit**

morning and turn off after the staff have gone home.	**is to be running all the time then make the on and off time the same**
Calibrating the water temperature. The unit is factory set for 85 degrees	• **Once the installation procedure is finished and the boiler is running, use the scroll keys to find "CALIBRATE BOIL – ENTER TO START" in the menu** • **Press the "OK" button and the boiler will automatically calibrate it self to cut out two degrees below boil** • **This will typically take about 5 minutes.** • **When it has finished the controller will automatically revert to the home screen.**
Turning off the childproof button	• **If there is no need for using the childproof button then it can be de-activated** • **Using the keypad scroll to "CHANGE CHILD LOCK" and press "OK"** • **Use the scroll keys to change the setting and press "OK"** • **The screen will confirm your choice and reset to the home screen**
Changing the filter	• **The boiler can be programmed to give a warning to change the filter either every 90, 120, 150 or 180 days** • **At this point the red light on the tap will illuminate until the filter needs to be changed.** • **The timer will have to re-set once the filter is changed – scroll through "FILTER CHANGE?" on the menu and the time the filter has been in service will show.** • **Press "OK" and "ENTER TO CONFIRM FILTER REPLACED" will show** • **Press "OK" again and the screen will confirm your choice with "NEW FILTER NOW IN SERVICE"**

The unit is now ready to dispense water. It will take around half and hour to come to the boil depending on the temperature of the supply water.

OPERATION



The appliance is very simple to use.

OPERATION

The green light will illuminate at the base of the tap to indicate that the water is above 90 degrees and is ready to use.

Cold or ambient water will be dispensed then the lever with the blue marking on it is pushed backwards.

The hot water will be dispensed when the lever with the red marking on it is depressed in conjunction with the black button that is between the two levers on the top if the tap. It is an option to turn off the child proof button – see the instructions above. It is recommended that the tap be left on of there is any chance someone not familiar with the tap will use it.

After six months the red light at the base of the tap will illuminate to let you know that the filter for the water needs changing.

The green light will illuminate on the base of the tap when the water in the reservoir is above 90 degrees.

MAINTENANCE and SERVICE

All maintenance on the appliance should be carried out by Aqua Cooler or someone who is suitably qualified to maintain the equipment. Aqua Cooler maintains a full inventory of spare parts for the product and in the event of any problems with the unit please do not hesitate to call the service department on 1800 649 233.

The tap is safe to be wiped down but avoid getting the tap wet. The same applied for the boiler under the sink.

Some quick checks

"OFF" on the home screen	**Unit is in sleep mode – check timer setting.**
"NO TAPS"	**RJ11 tap link is not plugged in or connection has water in it – if the latter call Aqua Cooler**
"ON" showing on display but no hot water	• **Back up thermostat may have activated indicating tank has boiled dry – water supply may be cut off. Will have to reset – see service manual** • **Faulty pump** • **Faulty solenoid valve**
Screen blank	• **Power to the unit may be switched off** • **Power supply may be faulty – Call Aqua Cooler**